



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

647.4210

Job Sheet 211947



Part No: 647.4210

Part Name: Bracket LH



Part Weight: 0 lbs

Job Created: 7/31/20

Due Date: 8/21/20

Type: SOLD

Note: DWG REV N/C IPP REV A RQ 14/05/28 VERIFIED BY DD

Ship Via:

Job Qty: 8 pcs

POSITIVE RECALL

EFFECTIVE 20-08-13

RELEASED 55

Status: New

Job Tracking No:

Created By: Marie Lajeunesse

Description:

DATE SEP 18 2020

Priority: Medium

need emy app. formal.
cs per ECR19

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Run Hrs Hrs	Workcenter/Supplier	Sign-off
100	Bandsaw - 1	8 pcs	8/20/20	8/20/20	0.00 0.83	Bandsaw - 1	max. 20.08.11
110	HAAS 4 Axis - B4B	8 pcs	8/21/20	8/21/20	1.00 2.50	HAAS - 1 - B4B	
						HAAS - 2 - B4B	
						HAAS - 3 - B4B	DAS 52 20/09/11
						HAAS - 4 - B4B	9-89
120	QC 2	8 pcs	8/21/20	8/21/20	0.00 0.00	QC 2 - 1	
						QC 2 - 12	
						QC 2 - 14	
						QC 2 - 17	
						QC 2 - 19	
						QC 2 - 2	
						QC 2 - 20	
						QC 2 - 22	
						QC 2 - 23	
						QC 2 - 25	
						QC 2 - 32	
						QC 2 - 33	
						QC 2 - 35	
						QC 2 - 39	
						QC 2 - 4	
						QC 2 - 40	
						QC 2 - 44	
						QC 2 - 45	
						QC 2 - 48	
						QC 2 - 49	
						QC 2 - 50	
						QC 2 - 51	DAS 52 20/09/11
						QC 2 - 52	9-89
						QC 2 - 57	
						QC 2 - 62	
						QC 2 - 63	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S293402



Part: 647.4210

Job No: 211947

Serial No/Batch: S293402

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Date: 08/11/20

Plex 7/31/20 12:44 PM Dart.lajeunesse.marie

130 QC 8	8 pcs	8/21/20	0.00 0.00	QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	32-08-19
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
140 Outsource - 4 - Anodize	8 pcs	8/21/20	0.00 0.00	QC 8 - 4	
				QC 8 - 44	
150 Packaging 2-1 - Receive - B4B	8 pcs	8/21/20	0.00 0.00	QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
				QC 8 - 66	
				QC 8 - 73	
				QC 8 - 82	
				ATG001-VC	2020-08-17
				Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	AUG 20 2020
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	

				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
				Packaging 2 - 37 - B4B	
155	QC 6	8 pcs	8/21/20	0.00 0.00	QC 6 - 9
					QC 6 - 68
					QC 6 - 61
					QC 6 - 40
					QC 6 - 81
					QC 6 - 82
180	Packaging 3-1 - Stock - B4B	8 pcs	8/21/20	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
					Packaging 3 - 18 - B4B
					Packaging 3 - 19 - B4B
					Packaging 3 - 20 - B4B
					Packaging 3 - 21 - B4B
					Packaging 3 - 22 - B4B
					Packaging 3 - 23 - B4B
					Packaging 3 - 24 - B4B
					Packaging 3 - 25 - B4B
					Packaging 3 - 26 - B4B
					Packaging 3 - 27 - B4B
					Packaging 3 - 28 - B4B
					Packaging 3 - 29 - B4B
					Packaging 3 - 30 - B4B
					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B
					Packaging 3 - 33 - B4B

				Packaging 3 - 34 - B4B		
				Packaging 3 - 35 - B4B		
				Packaging 3 - 36 - B4B		
				Packaging 3 - 37 - B4B		
190	QC 21 - SA	8 pcs	8/21/20	0.00 0.00	QC 21 - SA - 21	DAS 21 9-89
				QC 21 - SA - 70		
				QC 21 - SA - 9		
				QC 21 - SA - 77		




 SEP 18 2020

Part Op 100 - (Bandsaw) Cut Blanks at 9.10"
 Descriptions: 110 - AAS1-1 (HAAS CNC Vertical Machine) 1-Machine per folio FB305
 120 - (QC2- Inspect parts off machine FAI/FAIB)
 130 - (QC8- Inspect parts - second check)
 140 - (Outsource process-Anodize per QSI017 4.1.10.1) Issue P/O to ATG : 46914 1- Black Anodize as per Dwg 647.4200
 150 - (Receive & Inspect for Damage & Mat'l Certs) Mat'l Certs req'd.
 155 - QC6- All purchased or subcontracted products
 180 - (Identify as per dwg & Stock Location: _____) ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***
 190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6A1.250X1.00X0.100X0.125	7075T6 Angle 1.25" X 1.00" X .100W" X .125R	6.0800 ft (.76 ea)	100-Bandsaw - 1	M136 944

(3.04) = 4 pcs.

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Bandsaw - 1	M7075T6A1.250X1.00X0.100X0.125	6	7	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Bracket, LH	8.900inches ± 0.010	8.910 8.890	8.900	
2	Bracket, LH	0.250inches ± 0.010	0.260 0.240	0.250	
3	Bracket, LH	17.100Degrees ± 0.500	17.600 16.600	Angle 17.100	
4	Bracket, LH	3.250inches ± 0.010	3.260 3.240	3.250	
5	Bracket, LH	1.600inches ± 0.010	1.610 1.590	1.600	
6	Bracket, LH	121.300Degrees ± 0.500	121.800 120.800	Angle 121.4	
7	Bracket, LH	0.375inches ± 0.005	0.380 0.370	Radius 0.375	
8	Bracket, LH	0.689inches ± 0.005	0.694 0.684	0.689	

Plex 7/31/20 12:44 PM Dart.lajeunesse.marie

RE: 647.4210/.4211



Jacob Becker

Tue 8/4/2020 8:03 PM

To: Jean-Luc Menard

Cc: Guillaume Auclair; Kimberley Guerin; Jason Gardiner; Alex Quan; Karolanne Ouimet; Pablo Bravo

It is acceptable to reference QQ-A-200.

Currently we do not have a deviation process outside of signing off on a non-conformance from quality.

Jason/Alex/Pablo,

Here is one example of a deviation for a minor change to a drawing that we would not normally immediately act on, but requires some action be taken.

Additional discussion points for tomorrow!

Regards,

JACOB BECKER

Lead Sustaining Engineer

DART AEROSPACE

T 1 760 509-1639

M 1 760 691-9108

From: Jean-Luc Menard <jmenard@dartaero.com>

Sent: Tuesday, August 04, 2020 11:06 AM

To: Jacob Becker <jbecker@dartaero.com>

Cc: Guillaume Auclair <gauclair@dartaero.com>; Kimberley Guerin <kguerin@dartaero.com>

Subject: 647.4210/.4211

Hi Jacob,

We just noticed that these parts call up QQ-A-250 spec that refers to plate.

As the dwg clearly shows this part is made from extruded angle and should call out QQ-A-200 spec.

Is this something you can approve a deviation on?

Let me know,

Thx

JL

Jean-Luc Menard

Production Manager

DART AEROSPACE

T 1 613 632-5200 x 227

F 1 613 632-5246

1 800 556-4166

www.dartaerospace.com

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046914



Supplier: ATG001-VC
A.T.G. Industries Inc
760 INDUSTRIELLE STREET
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB046914

PO Date: 8/17/20

Due Date: 8/28/20

Purchase Order

Revision:

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	211822	D4726-1	D4726 Rev B	Handle : Various STC's Outsource4 (Outsource process- Anodize per QSI017 4.1.10.1)	Firmed XG	-	8/21/20	8 pcs	0 pcs	8 pcs	\$5.60/pcs	\$44.80

AUG 20 2020

Line Item Note RUSH

2	OH212243	C10-2	C10-2 Rev 9	Side Plate - MRK -Issue P/O to ATG: - STRIP -ANODIZE COLOR BLACK, PER IAW MIL-A- 8625F TYPE 2 CLASS 2, Water sealant -Certificate of Conformity is required	Firmed	-	8/21/20	4 pcs	0 pcs	4 pcs	\$6.95/pcs	\$27.80
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Line Item Note RUSH



Dart Aerospace Ltd.
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046914



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	OH212241	C10-1	C10-1 Rev 9	Side Plate Solenoid Side -Issue P/O to ATG : - STRIP -ANODIZE COLOR BLACK, PER IAW MIL-A-8625F TYPE 2 CLASS 2, Water sealant -Certificate of Conformity is required	Firmed	-	8/28/20	1 pcs	0 pcs	1 pcs	\$6.95/pcs	\$6.95
4	211914	647.4113	647.4100 Rev N/C3	Clip : Various STC's (Outsource process- Anodize per QSI017 4.1.10.1) HARD ANODIZE, COLOR BLACK AS PER DWG. (SEE NOTE 2)	Firmed X6	-	8/28/20	6 pcs	0 pcs	6 pcs	\$9.90/pcs	\$59.40
5	211063	RB T103316- 101-125	T103316 Rev B	Frame -Issue P/O to ATG : PO -ANODIZE COLOR RED, PER IAW MIL- A-8625 TYPE- 2 CLASS-2, Water sealant -Certificate of Conformity is required	Firmed	-	8/28/20	16 pcs	0 pcs	16 pcs	\$6.95/pcs	\$111.20
6	211913	647.4211	647.4200 Rev N/C	Bracket RH : Various STC's (Outsource process- Anodize per QSI017 4.1.10.1) Issue P/O to ATG :	Firmed X4	-	8/28/20	4 pcs	0 pcs	4 pcs	\$6.95/pcs	\$27.80

AUG 20 2020

AUG 20 2020



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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046914



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
7	211947	647.4210	647.4200 Rev N/C	Bracket LH : Various STC's (Outsource process- Anodize per QSI017 4.1.10.1) Issue P/O to ATG : 1- Black Anodize as per Dwg 647.4200	Firmed X4	-	8/28/20	4 pcs	0 pcs	4 pcs	\$6.95/pcs	\$27.80

AUG 20 2020

Grand Total: \$305.75

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/20/20 2:30 PM dart.charest.martin



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 920677

Date: 19-Aug-20

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Kimberley Guerin
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.			
6 ea	Part: 647.4113 Clip Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Batch/Lot#: 5265778 Job: 27980 PO: POHB046914	Rev: N/C3	
		Expiry Date: N/A Line: 4	
4 ea	Part: 647.4211 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Batch/Lot#: 5265778 Job: 27982 PO: POHB046914	Rev: N/C	
		Expiry Date: N/A Line: 6	
4 ea	Part: 647.4210 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Batch/Lot#: 5265778 Job: 27983 PO: POHB046914	Rev: N/C	
		Expiry Date: N/A Line: 7	

Made in Canada.

DAS
81
9-89



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 920677

Date: 19-Aug-20

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Kimberley Guerin
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms	Ship Via
	ATG Delivery
Quantity	Description
	CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>AUG 19 2020</u> Certified Signature: <u></u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt. DAS 81 9-89
	Made in Canada.



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K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

ENGINEERING CHANGE REQUEST

ECR 19

Date Opened:	8/4/20 8:06 PM	Requested By:	Becker, Jacob
Type:	Drawing/Pattern Change	Requester*:	Menard, Jean-Luc
Priority:	Medium	DE Approver*:	Gardiner, Jason
Status:	Under Review	Responsible Engineer:	Fuentes, Roberto
Reason:	Revise Delta Note 1 per the following comments from production HBY "As the dwg clearly shows this part is made from extruded angle and should call out QQ-A-200 spec."	ECR Lead*:	Becker, Jacob
Expense:	400		
Target Date:			
Execution Date:			
ECR Approval No:			
RE (R&D):		**BRIEF DESCRIPTION**:	647.4200 NC1, Brackets, Wrong Material Callout
Status Note:		DESCRIPTION/ ADR CONTENT**:	QQ-A-250 incorrectly called out for the material spec.

CUSTOMER APPROVALS

Customer	Customer Visible	Customer Approval Required	*	Customer Approved
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ATTACHMENT PAGES

Document Name	Document Note
acceptable of material for 647.4210-11.pdf	

PARTS

Part No	Rev	Part Status	Name	Type	Customer Part	Special Comments	Documents
647.4210		Active	Bracket LH	Sub-assembly	647.4210 647.4210 647.4210 647.4210		
647.4211		Active	Bracket RH	Sub-assembly	647.4211 647.4211 647.4211 647.4211		

INVENTORY DISPOSITION

Part No Revision	Material No	Current Inventory Qty	Purchasing On-Order Qty	Qty Scheduled for Production
647.4210		5 Use as is	0 *	4 Adjust Jobs Scheduled
647.4211		4 Use as is	0 *	4 Adjust Jobs Scheduled

EFFECTS

Effect Group	Effects
2. ECR Lead Assessment - Impacted Docs & Output	Drawing Change Required (647.4200 material call out for 644.4210 and 644.4211 needs to be updated to QQ-A-200 spec)
3. ECR Lead Assessment - Status During ECR	UR - Deviations Allowed (QQ-A-200 spec may be referenced for the material of 644.4210 and 644.4211. See email attachment for reference.)
4. Production Type	In-house production
5A. ECR Lead Assessment - MINOR Changes	Correction of drawing errors (647.4200 material call out for 644.4210 and 644.4211 needs to be updated to QQ-A-200 spec)
9. Sustaining Cost Grouping	Manufacturing Improvement

Entered: 2R Date: OCT 01 2020



NCR No. 20-8515 **WORK ORDER NON-CONFORMANCE / ROUTE UPDATE**

Route update only ☐

Job: <u>211947</u> Part No. <u>647.420</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☒ Water Jet ☐ Supplier Quality ☐					
Date: <u>20-9-21</u>		Sequence #: <u>100</u>		QTY Affected: <u>4</u>		MRB (QSI042) DAS 9 9-89 <u>as per Attach email 20-9-21</u>			
Description Work Order Deviation				Disposition					
Incorrect material called out on drawing. 7075-T651 per AMS-QQ-A-250/12 which is spec for plate. Material use for job is per AMS-QQ-A-200				Acceptable to use material per AMS-QQ-A-200 as per ECR 19					
				Completed By <u>52 20/09/21</u> Lead hand / Supervisor <u>aml 20/09/21</u>					
				QC / QA Coordinator DAS 9 9-89 <u>20-9-21</u>					
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☒ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☒ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread							
		Other/Details:							